

KALYUZHNYY, A.Kh.; PUCHKOV, V.S.

Effect of the constant rotor inertia of a generator on the static stability of long-distance electric power transmission. Trudy Transp.-energ. inst. Sib. otd. AN SSSR no.11:163-177 '60. (MIRA 14:6)
(Electric power distribution) (Electric generators)

L-4474-56 EWT(1)/EWT(m)/FCC/T/EWA(h) IJP(c) GW

ACC NR: AP5024619

SOURCE CODE: UR/0048/65/029/009/1627/1630

AUTHOR: Dobrotin, N.A.; Zelevinskaya, N.G.; Kotel'nikov, K.A.; Maksimenko, V.M.; Puchkov, V.S.; Slavatinskiy, S.A.; Smorodin, Yu. A.

28
QB

ORG: none

TITLE: Phenomenological picture of secondary particle production in nucleon interactions at hundreds and thousands of BeV. /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 9, 1965, 1627-1630

TOPIC TAGS: primary cosmic ray, secondary cosmic ray, pi meson, high energy particle, particle production

ABSTRACT: The authors briefly review the experimental data on secondary particle production by primary cosmic rays. The inelastic interaction cross section is practically constant for energies from 20 to 105 BeV, and the inelasticity is constant and equal to 0.4-0.5 for energies up to 10^4 BeV. About 90% of the secondaries are pions. Two production mechanisms are distinguished: fireball production, and production and decay of excited nucleons (isobars). Most of the secondaries are produced by the fireball mechanism. In the hundred BeV range there is a reference system in which the pions are emitted isotropically. In this system the pion energy distribution can be represented, except for a high-energy tail, by a Bose-Planck function for a temperature of 0.7-1.0

Card 1/2

09010321

L 4477-66

ACC NR: AP5024619

pion masses. In the thousand BeV region there are indications that two or more fireballs may be produced. The high-energy tail on the pion energy distribution is ascribed to decay of highly excited isobar states. It is shown that the exponents in the atmospheric energy spectra of nuclear-active particles and of high-energy photons (ascribed to pion decay) are very nearly the same. From this it is concluded that the energies of the high-energy pions are proportional to the energies of the primaries producing them. Only a few (one or two) high energy pions are produced in each interaction, and these carry 10-20 % of the incident particle energy. It is anticipated that counter installations now under construction will provide more accurate data on both pion production mechanisms in the thousand VeV range. Orig. art. has: 6 formulas, 2 figures, and 1 table.

SUB CODE: NP/ SUBM. DATE: 00/

ORIG REF: 007/ OTH REF: 009

PC
Card 2/2

PETRENKO, P.V.; EL'KIN, I.L.; KAZAKOV, S.S.; VOZHIK, D.L.; DENISOV, V.V.; PUCHKOV, V.I.; BOGUTSKIY, N.V.; SAVEL'YEV, I.P.; KOLENTSEV, M.T.; MERKULOV, N.Ya.; VERKLOV, V.A.; OVSYANNIKOV, P.A.; SOSNOV, V.D., otv. red.; CHIZHOVA, V.V., otv.red.; ZHUKOVA, A.P., red.; LEVINA, T.I., red.; PRONINA, N.D., tekhn. red.; OVSEYENKO, V.G., tekhn. red.

[Practice of using cutterloaders]0pyt ispol'zovaniia ochistnykh kombainov; sbornik statei. Moskva, 1962. 102 p.
(MIRA 16:2)

1. TSentral'nyy institut tekhnicheskoy informatsii ugol'noy promyshlennosti.

(Coal mining machinery)

L 22085-66 EWT(1) GW

ACC NR: AP6012928

SOURCE CODE: UR/0362/66/002/001/0028/0038

AUTHOR: Puchkov, V. V.--Pouchkov, V. V.; Titov, S. I.33
B

ORG: none

TITLE: Use of data on outgoing radiation for determining the temperature and humidity fields

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 1, 1966, 28-38

TOPIC TAGS: radiosonde, electronic computer, cloud cover, atmospheric temperature, atmospheric humidity, earth radiation

ABSTRACT: The initial data for computation of the statistical characteristics of outgoing radiation in the spectral region $8-12 \mu$ were the fluxes of outgoing radiation in the mentioned spectral range, computed on an electronic computer using radiosonde data for the winter season 1957-1958 at 0000 GMT at an extensive network of stations. Thirty maps of the flux of outgoing radiation were computed. The following assumptions were made: cloud cover at a particular station was absent or at a height of 2-4 km there was a continuous cloud cover which is visualized as an ideally black surface and the temperature of the upper cloud boundary is equal to the temperature of the surrounding air and the temperature of the underlying surface is equal to air temperature at the level of the psychrometric enclosure. It is shown that the structural function of the radiation field of the underlying surface, Card 1/2

UDC: 551.521.2

L 22085-66

ACC NR: AP6012928

radiation from the upper boundary of a continuous cloud cover in the mentioned spectral interval and effective moisture content increases almost linearly to 1,500 m and attains saturation at a distance of 3,000 km. A relationship has been established between the radiation of the earth's surface, total radiation of the atmosphere, temperature of the radiating surface and effective moisture content. Orig. art. has: 5 figures, 14 formulas and 9 tables. [JPRS]

SUB CODE: 04, 09 / SUBM DATE: 08Jun65 / ORIG REF: 012 / OTH REF: 003

Card 2/2 BlG

PUCHKOV, V.V., donsent; CHERNITSKIY, G.I., kand. med. nauk

Primary drug resistance of Mycobacterium tuberculosis in patients
with pulmonary tuberculosis. Probl. tub. no.7:14-17 '64.
(MIRA 18:10)

1. Kafedra tuberkuleza (nachal'nik - doktor med. nauk V.A.
Vasil'yev) Voyenno-meditsinskoy akademii imeni Kirova, Leningrad.

PUCHKOV, V.V.; TITOV, S.I.

Use of data on outgoing radiation for restcring the temperature
and humidity fields. Izv. AN SSSR. Fiz. atm. i okeana 2 no.1:
28-38 Ja '66. (MIRA 19:1)

1. Submitted June 8, 1965.

PUCHKOV, Ya.

PUCHKOV, Ya.; KOVALEV, D.

Breaking off coal by blasting in heavily pitching longwalls.
Mast. ugl. 6 no.12:3-4 D '57. (MIRA 11:1)

1.Glavnyy inzhener tresta Leninugol' kombinata Voroshilovgradugol'
(for Puchkov). 2.Zamestitel' nachal'nika tekhnicheskogo otdela tresta
Leninugol' kombinata Voroshilovgradugol' (for Kovalev).
(Coal mines and mining)
(Blasting)

PUCHKOV, Ya.; KOVALEV, D.

Our plans. Mast. ugl. 7 no. 7:11-12 J1 '58.

(MIRA 11:8)

1. Glavnyy inzhener tresta Leninugol' kombinata Luganskugol' (for Puchkov), 2. Nachal'nik tekhnicheskogo otdela tresta Leninugol' kombinata Luganskugol' (for Kovalev).
(Coal mines and mining)

PUCHKOV, Ya.; KOVALEV, D.

Cutter-loader for inclined seams. Mast.ugl. 8 no.1:15 Ja '59.
(MIRA 12:3)

1. Glavnnyy inzhener tresta Leninugol' Luganskogo sovnarkhoza (for
Puchkov). 2. Nachal'nik tekhnicheskogo otdela tresta Leninugol'
Luganskyo sovnarkhoza (for Kovalev).
(Coal mining machinery)

PUCHKOV, Ya.; KOVALEV, D.

Discontinuous mine operation. Mast.ugl. 8 no.2:9-10 P '59.
(MIRA 13:4)

1. Glavnyy inzhener tresta Leninugol' Luganskogo sovnarkhoza (for
Fuchkov). 2. Nachal'nik tekhnicheskogo otdela tresta Leninugol'
Luganskogo sovnarkhoza (for Kovalev).
(Lugansk Province---Coal mines and mining)
(Mine management)

DANCHEV, P.S., kand. tekhn. nauk; PUCHKOV, Ya.M.; VETLUZHISKIKH, V.P.

Effect of the delay time on the fragmentation quality of the
rock blasted by borehole charges. Vzryv. delo no.55/12:
188-195 '64. (MIRA 17:10)

PUCHKOV, Ya.D., gornyy inzh.; KOVALEV, D.F., gornyy inzh.

Over-all mechanization of stoping operations in the Leninugol' Trust mines. Ugol' Ukr. 5 no.9:20-21 S '61. (MIRA 14:9)
(Donets Basin—Coal ~~mines~~ and mining)

DANCHEV, P.S.; PUCHKOV, Ya.M.; VETLUZHISKIKH, V.P.

Effect of short-delay blasting on the quality of the shattering
and breakdown of rock. Trudy Inst.gor.dela UFAN SSSR no.7:27-35
'63. (MIRA 17:3)

DANCHEV, P.S.; PUCHKOV, Ya.M.

Effect of an exposed surface on the degree of crushing of the
medium by a blast of a charge of explosives. Trudy Inst.for dela
UFAN SSSR no.7:15-26 '63. (MIRA 17:3)

PUCHKOV, Ya.M.

Device for measuring the diameter of a borehole. Trudy Gor.-geol.
inst. UFAN SSSR no.57:119-125 '61. (MIRA 15:3)
(Boring)

PARFENOV, G.V.; PUCHKOV, Ya.M.

Effect of some factors on the efficiency of blasting en masse
in the pits of the Bakal Mining Administration. Trudy Gor.-geol.
inst. UFAN SSSR no.34:103-106 '58. (MIRA 14:10)
(Bakal region--Strip mining)
(Blasting)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343520013-9

PUCHKOV, Ya.M.; PARFENOV, G.V.

Boring and blasting in the pits of the Bakal Mining Administration.
Trudy Gor.-geol. inst. UFAN SSSR no.34:107-113 '58. (MIRA 14:10)
(Bakal region--Boring)
(Blasting)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343520013-9"

L 11338-67 EWT(1)---GW
ACC NR: AP6029748

SOURCE CODE: UR/0210/66/000/005/0130/0137

17

AUTHOR: Moiseyenko, F. S.; Puchkov, Ye. P.; Borozdin, Yu. G.

ORG: Institute of Geology and Geophysics, Siberian Department, AN SSSR, Novosibirsk
(Institut geologii i geofiziki Sibirskoye otdeleniye AN SSSR)

TITLE: Geophysical data on the morphology of granitic massif in the Novosibirsk
section of the Ob basin

SOURCE: Geologiya i geofizika, no. 5, 1966, 130-137

TOPIC TAGS: gravimetric survey, deep drilling, granite, geo-
physical prospecting, Geomorphology

ABSTRACT: The article analyzes the form of Barlak, Bibeyevo, and Novosibirsk
granitic massifs on the basis of gravimetric data. This investigation is connected
with preparation of a preliminary sketch of the Novosibirsk super-deep borehole.
Spatial characteristics of the massifs are given. It is concluded that the anomalies
above these granitic massifs are mainly due to irregularity of their bases. Orig.
art. has: 3 figures.

SUB CODE: 08 / SUBM DATE: 20Feb65/ ORIG REF: 004/ OTH REF: 002/

UDC: 552.321.1:550.83(571.14)

Card 1/1

PUCHKOV, Ya.P.; FEDOSYEV, G.S.

Structure of the Shindinskiy pluton (Eastern Sayan) according to
geological and geophysical data. Geol. i geofiz. no. 3:84-93 '65.
(MIRA 18:6)

I. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

KARATAYEV, G.I.; SERBULENKO, M.G.; GUSOV, Yu.M.; KOLMOGOROVA, P.P.;
LUK'YANOVA, N.N.; PUCHKOV, Ye.P.; SARYCHEVA, Yu.K.

Solution of some problems in gravity and magnetic prospecting
by means of computers. Trudy Inst. geol. i geofiz. Sib. otd.
AN SSSR no.21:22-88 '63. (MIRA 17:11)

PUCHKOV, Ye.V.

Using thermoluminescence to study secondary quartzites. Dokl. AN
SSSR 161 no. 5:1195-1196 Ap '65. (MIRA 18:5)

1. Kazakhskiy gosudarstvennyy universitet im. S.M.Kirova. Sub-
mitted October 28, 1964.

PUCHKOV, Yu.G. (Leningrad, prospekt Engel'sa, 28, kv.194)

Myxoid liposarcoma of the soft tissue. Vop onk. 10 no.8:32-40 '64.
(MIRA 18:3)

1. Iz patomorfologicheskoy laboratorii (nauchnyy rukovoditel' -
deystvitel'nyy chlen AMN SSSR prof. M.F.Glazunov) Instituta onkologii
AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. A.I.Serebrov).

PUCHKOV, S.V.; KHOVANOVA, R.I.

Observations of seismic expeditions in the southwestern part of the
Baikal region during 1958-1959. Biul. Sov. po seism. no.10:30-39 '60.
(MIRA 13:11)

1. Institut fiziki Zemli AN SSSR, Moskva.
(Baikal region—Seismology)

USSR/Farm Animals. Domesticated Fowl.

Q

Abs Jour: Ref Zhur-Diol., No 20, 1953, 92657.

Author : Smetnev, S.I., Ozerov, I.V., Shapovalov, Ya. Ya., Puchkov,
Ye. A., Luk'yanova, V.D., Voskresenskiy, V.I.

Inst : Moscow Agricultural Academy im. K.A. Timiryazev.

Title : Raising Chicks on Deep Litter.

Orig Pub: Ptitsvodstvo, 1957, No 126-131.

Abstract: The experiment was made at the experimental base
of the Moscow Agricultural Academy im. K.A. Timir-
yazev. 850 day old chicks of the Russian White,
Moskovskiy, kudravskiy, Jubilee, Livenskiy varie-
ties were placed in individual sections of the coop
with 12-14 chicks per square meter of floor. Dry
slaked lime was poured onto the floor (1 kg per 1 m²)

Card : 1/2

PUCHKOV, Ye. A.

USSR/Farm Animals - Poultry.

Q-3

Abs Jour : Ref Chur - Biol., No 1, 1959, 2732

Author : Ozarov, A.V., Puchkov, Ye.A., Voskresenskiy, B.N.

Inst : Moscow Agricultural Academy imeni K.A. Timiryazev

Title : Zoohygienic Assessment of the Maintenance of Chicks on
a Deep Litter.

Orig Pub : Dokl. Mosk s.-kh. akad. im. K.A. Timiryazeva, 1957, vyp.
30, ch. 2, 234-239.

Abstract : The thickness of the litter layer consisting of minute
wood shavings was 3-4 cm at the beginning of the test,
and 20-22 cm at the end of 3 months. Once every 1.5-2
weeks it was overlain by a layer of clean and dry lining.
The density of the rearing of chicks was 12-14 head per
sq. meter of floor area. The temperature of the litter
increased as it grew thicker. It exceeded air temperature
by 5-6°C. The chicks grew and developed well.

Card 1/1

PUCHKOV, Ye.I., inzh.

Large hydraulic-fill dam built without banking on the Amur River
as a ship basin wall. Rech.transp. 16 no.9:26-27 S '57.

(MIRA 10:12)

(Amur River--Dams)

USSR/Farm Animals - Large Horned Cattle.

Q-2

Abs Jour : Ref Zhur - Biol., No 18, 1958, 83378

Author : Puchkov, Ye.A.

Inst : Moscow Academy of Agriculture imeni K.A. Timiryazev.

Title : The Problem of Proper Keeping of Dairy Cattle in Stalls
during Wintertime.

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva, 1957, vyp.
30, ch. 2, 99-104.

Abstract : No abstract.

Card 1/1

VARLAMOV, A.S.; MIKHAYLOV, I.N.; NIKITIN, A.A.; PUCHKOV, Ye.P.;
TARKHOV, A.G.

Some features of the method of processing the results of geo-
physical research in direct prospecting for diamonds in the
Yakut A.S.S.R. Izv. vys. ucheb. zav.; geol. i razv. 3 no.12:82-
97 D '60. (MIRA 14:5)

1. Moskovskiy geologorazvedochnyy institut imeni S. Ordzhonikidze.
(Yakutia—Diamonds)
(Prospecting—Geophysical methods)

SUDARIKOV, B.N.; ZAYTSEV, V.A.; PUCHKOV, Yu.G.

Extraction of scandium, yttrium, cerium, lanthanum, uranium
and thorium salicylates. Nauch.dokl.vys.shkoly; khim.i khim.
tekhn. no.1:80-83 '59. (MIRA 12:5)

1. Predstavlena kafedroy tekhnologii radioaktivnykh i redkikh
elementov Moskovskogo khimiko-tehnologicheskogo instituta im.
D.I. Mendeleyeva.
(Metals--Analysis) (Salicylates)

5(2)

SOV/156-59-1-19/54

AUTHORS:

Sudarikov, B. N., Zaytsev, V. A., Puchkov, Yu. G.

TITLE:

The Extraction of the Salicylates of Scandium, Yttrium, Cerium,
Lanthanum, Uranium, and Thorium (Ekstraktsiya salitsilatov
skandiya, ittriya, tseriya, lantana, urana i toriya)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya
tekhnologiya, 1959, Nr 1, pp 80 - 85 (USSR)

ABSTRACT:

The work is an attempt to attain the separation of the elements mentioned by means of the extraction taking place with complex formation. The extraction was controlled by the radioactive isotopes

Sc^{46} , Y^{90} , Ce^{141} , La^{140} , and Th^{234} . Salicylic acid was chosen because it easily forms complex compounds with metals and is readily soluble in organic solvents. Isoamyl alcohol was used as a solvent. The distribution coefficient K of salicylates between the aqueous and organic phase was checked in dependence on the pH of the solution (Diagram). The following substances were quantitatively extracted: scandium salicylate at pH values between 3.5 - 5.5; yttrium salicylate at pH

Card 1/2

The Extraction of the Salicylates of Scandium, Yttrium, SOV/156-59-1-19/54
Cerium, Lanthanum, Uranium, and Thorium

values higher than 4, lanthanum salicylate at pH values higher than 4.5; cerium salicylate at pH values higher than 5.0 and thorium salicylate at pH values higher than 3.0. Uranium salicylate was extracted between pH 2.5 to 5.5, with higher pH values, however, a crystalline precipitate is formed which was analyzed as $\text{NH}_4^+ \text{UO}_2(\text{HSal}^-)_3 \cdot 4\text{H}_2\text{O}$. A

straight line with the tangent of the inclination angle = 2 resulted from the coordinate system $\lg(\kappa) - \lg(\text{H}^+)$ with a constant salicylic acid concentration and from the system $\lg(\kappa) - \lg(\text{HSal})_{\text{org}}$ at a constant pH = 2.2. Thus 2 H^+ ions are emitted in the reaction with salicylic acid. There are 3 figures and 10 references, 3 of which are Soviet.

ASSOCIATION: Kafedra tekhnologii radioaktivnykh i redkikh elementov Moskovskogo khimiko-tehnologicheskogo instituta im. D.I. Mendeleyeva (Chair of the Technology of Radioactive and Rare Elements of the Moscow Institute of Chemical Technology imeni D.I. Mendeleyev)

SUBMITTED: June 28, 1958
Card 2/2

GLAZJNOV, M.F.; PUCHKOV, Yu.G.

So-called human muscular myxomas and myxosarcomas with intra-cellular inclusions. Vop. onk. 6 no.7:11-27 Je '60. (MIRA 14:4)
(MUSCLES—TUMORS)

PUCHKOV, Yu. N.

100-7-7/11

AUTHCRS: Myasnikov, V.G., Fuchkov, Yu.N. and Chernoperov, N.Ye.,
Engineers.

TITLE: Mobile Crushing and Sorting Plant (Perevodizhnaya drobil'no-
sortirovochnaya ustanovka)

PERIODICAL: Mekhanizatsiya Stroitel'stva, 1957, vol.14, no.7,
p. 21 (USSR).

ABSTRACT: This plant consists of 2 machines: CM-311 and CM-312
and is used for crushing materials with a crushing strength up
to 2 500 kg/cm². Technical data are tabulated. All operations
are directed from the operator's cabin which is situated on
the platform. The crushed material is transported to the
bunkers by conveyors. The bunkers are so constructed that
various fractions can be mixed. This plant is manufactured by
the vyksunsk factory for Crushing and Sorting Equipment
(vyksunskiy zavod drobil'no-sortirovochnogo oborudovaniya).
There is 1 table.

AVAILABLE: Library of Congress
Card 1/1 1. Construction-Equipment

PUCHKOV, Yu.N., inzhener; KIREYEV, V.V., inzhener.

Improved movable crushing and screening units. Stroili dor.
mashinostr. 2 no.7:25-27 Jl '57. (MIRA 10:?)
(Crushing machinery)

PUCHKOVA, A.I., kandidat meditsinskikh nauk; LEGLER, F.P., kandidat biologicheskikh nauk.

Blood cholesterol and phospholipids in typhus exanthematosus. Lab
dela no.2:23-24 Mr-Ap '55. (MLRA 8:8)

1. Iz kafedry infektsionnykh bolezney (zav.-prof. S.V. Viskovskiy)
Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta
(TYPHUS, blood in,
cholesterol & phospholipids)
(CHOLESTEROL, in blood,
in typhus)
(PHOSPOLIPIDS, in blood,
in typhus)
(BLOOD,
cholesterol & phospholipids, in typhus)

FUCHKOV, V. V.; TARAKANOVA, K. N.; EMDIN, L. A.

Tuberculosis

Active pulmonary tonus in clinical pulmonary tuberculosis. Probl. tub. No. 2,
1952.

9. Monthly List of Russian Accessions, Library of Congress, August ¹⁹⁵² ~~1953~~ Unclassified.

Puchkov, Yu.

211

AUTHOR: Streltsov, V., Chief Engineer and Puchkov, Yu. Chief of the Construction Bureau.

TITLE: Constructional defects of some building machines. (O konstruktivnykh nedostatkakh nekotorykh stroitel'nykh mashin.)

PERIODICAL: "Mekhanizatsiya Stroitel'stva" (Mechanisation of Construction) 1957, Vol. 14, No. 1, p. 28 (U.S.S.R.)

ABSTRACT: Criticism of an article of the above heading which was published in Mekh. Stroitel'stva, 1956, No.10, October.

PUCHKOVA, A. V., Physician

"Etiology of Colitis in Measles." Thesis for degree of Cand. Medical Sci. Sub 6 Jun 49,
Second Moscow State Medical Inst imeni I. V. Stalin

Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering
in Moscow in 1949. From Vechnaya Moskva, Jan-Dec 1949.

ACCESSION NR: AP4038788

S/0048/64/0028/005/0914/0918

AUTHOR: Ronami, G.N.; Borovskiy, I.B.; Puchkova, A.K.

TITLE: Influence of temperature and minor impurities on the short wavelength fine structure in the absorption spectra of pure zinc and its alloys with silver Report, Seventh Conference on X-Ray Spectroscopy held in Yerevan 23 Sep to 1 Oct 1963

SOURCE: AN SSSR: Izvestiya. Seriya fizicheskaya, v.28, no5., 1964, 914-918

TOPIC TAGS: x-ray spectrum, x-ray absorption, temperature dependence, fine structure, zinc, zinc alloy, silver alloy, fine structure melting

ABSTRACT: In order to obtain information concerning the effect of small admixtures on the temperature "melting" of the K absorption fine structure in a non-transition metal, the K absorption spectra of zinc and five zinc-silver alloys containing from 0.1 to 2.5% silver were recorded at -190, 20 and 300°C, and the zinc spectrum was also recorded at 200°C. Zinc of 99.99% purity was employed. The alloys were annealed at 250°C for 30 to 40 hours, and the 8 to 10 micron absorbing foils were vacuum annealed for two or three hours. The spectrometer employed is described elsewhere (V. A. Batyrev and V. G. Bogdanov, Izv. AN SSSR, Ser. fiz. 25, 933, 1961). The spectra are pre-

Card 1/4

ACCESSION NR: AP4038788

sented graphically. The spectra of pure zinc and of the alloys containing from 1.5 to 2.5% silver were very similar. In these materials all the fine structure except the first peak nearly disappeared at 300°C. The alloys containing from 0.1 to 0.4% silver, on the other hand, still retained much of their fine structure at this temperature. The "melting" of the fine structure is presumed to be a result of the random displacements of the atoms from their equilibrium positions due to thermal motions. The mean square of these displacements is approximately proportional to T/MT_D^2 , where T is the temperature, M is the molecular weight, and T_D is the Debye temperature. It is accordingly concluded that the Debye temperature of Zn-Ag alloys containing from 0.1 to 0.4% Ag is greater than that of Zn or of alloys containing from 1 to 2.5 % Ag. The temperature dependence of the heights of the first four fine structure peaks in the zinc spectrum is compared with calculations performed by the method of V.V. Shmidt (Izv. AN SSSR. Ser. fiz. 27, 384, 1963). The experimental and theoretical values are merely tabulated and are not discussed. *Abstracter's note:* The conclusion concerning the Debye temperature is supported by the data in a table in which the Debye temperatures and the temperatures of fine structure "melting" are given for Cu, Au, Ge, Sn, Pt, Au and Pb, and the ratios of MT_D^2 for Zn:Cu, Zn:Ge, Zn:Sn, Pt:Au and Pt:Pb are compared with the corresponding ratios of the fine structure melting temperatures. Good agreement is shown for all the ratios except Pt:Pb,

Card 2/4

ACCESSION NR: AP4038788

and the discrepancy for this one is less than 30%. However, 1) the source of the fine structure melting temperatures is not revealed; 2) the definition of the fine structure melting temperature is not discussed, although this is not quite a trivial matter since the "melting" proceeds at different rates in different parts of the spectrum; 3) an arithmetical error was made in the calculation of the melting temperature ratio for Zn:Sn, and when this is corrected, the apparent agreement disappears; 4) the melting temperature ratios were calculated directly from the melting temperatures in degrees centigrade, which is not a reasonable procedure since the properties of water are not believed to be relevant to the phenomena discussed. When the melting temperature ratios are recalculated in terms of absolute temperature, the agreement between the Zn:Sn ratios is restored and that between the Zn:Cu and Zn:Ge ratios is improved. The agreement between the Pt:Pb ratios is destroyed entirely, and the Pt:Au ratios differ by about 23%. Moreover, the ratios for Zn:Pt (not tabulated by the authors) differ by only 14%. One can therefore say that the fine structure melting temperature is proportional to M_T^2 for all the elements listed except Pb, within an error of about 25%. The fact that the M_T^2 values for four of the six elements (excluding Pb) are within 10% of each other, however, considerably weakens the force of the argument.⁷ Orig.art.has: 4 formulas, 6 figures and 3 tables.

Card 3/4

ACCESSION NR: AP4038788

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta (Physics Department, Moscow State University)

SUBMITTED: OO

DATE ACQ: 12Jun64

ENCL: OO

SUB CODE: OP

NR REF Sov: 008

OTHER: 001

Card 4/4

RONAMI, G.N.; BOROVSKIY, I.B.; PUCHKOVA, A.K.

Effect of temperature and minor impurities on the shortwave fine structure of the absorption spectrum of pure zinc and its alloys with silver. Izv. AN SSSR. Ser.fiz. 28 no. 5: 914-918 My '64. (MIRA 17:6)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.

PUSHKOVA A.V.

PUSHKOVA A. V. *Etiology of colitis accompanying measles*, Pediatriya, Moscow
1949, 4 (25-31) Tables 4

Cases of measles are classified as: without intestinal disturbances (76), with early intestinal disturbances (25) and with severe colitis (95). Colitis cases are usually in under-nourished, rachitic children aged one to three years and suffering from measles complications. The mortality in this third group was high. In 86.4% the autopsy revealed dysenteric ulcer-necrotic intestinal lesions. In 38.9% (47) of the colitis cases, dysentery-producing strains (chiefly Flexner type V) were identified. In 71 of the 95 cases the colitis was ascertained epidemiologically to be a recurrence of a former attack of dysentery. The colitis seems to develop in consequence of measles anergy and of direct action of the measles virus on the intestinal mucosa.

Salamun - Mostar (XX, 7, 4)

So: Medical Microbiology and Hygiene, Section IV, Vol 3, No 1-6

PUCHKOVA, D.V.

A method for calculating the parementers of an infinite bed,
Geol. i geofiz. no.2:134-137 '63. (MIKA 16.5)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

(Geology, Stratigraphic)

L 20379-66 EWT(m)/ETC(f)/ENG(m) /DS
ACC NR: AP6006545

SOURCE CODE: UR/0191/65/000/011/0039/0042

AUTHORS: Pashkov, A. B.; Saldadze, K. M.; Semenova, Ye. I.; Puchkova, I. A.

38
B

ORG: none

TITLE: Heterogenic, highly basic anion-exchange membranes

SOURCE: Plasticheskiye massy, no. 11, 1965, 39-42

TOPIC TAGS: ion exchange, ion exchange membrane, ion exchange resin, copolymer, polyethylene plastic

ABSTRACT: It was the object of this investigation to construct heterogenic, highly basic anion-exchange membranes on the basis of a chloromethylated divinylbenzene-styrene copolymer and a polyethylene binder. Two types of polyethylene binders were used: low- and high-pressure polyethylene. The high basicity of the membranes was achieved by amination of the polymeric matrix with a 20% aqueous solution of trimethylamine and pyridine at different temperatures. The electrical resistivity, mechanical strength, relative elongation at the strength limit, swelling during amination, static capacity, and transference number in 0.1N NaCl of the membranes were determined. The experimental results are presented in graphs and tables (see Fig. 1). It was found that the ion-exchange properties of the constructed

UDC: 661.183.123.3

Card 1/2

L 20379-66

ACC NR: AP6006545

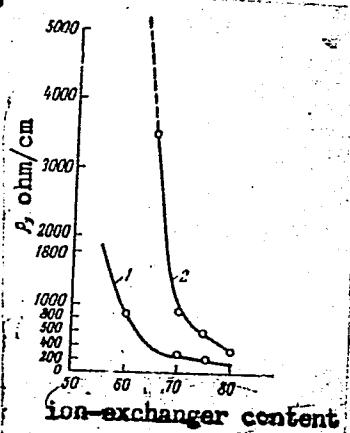


Fig. 1. Dependence of the specific electrical resistance ρ of the membranes on the basis of low- and high-pressure polyethylene ethylene, on the ion-exchanger content. Membranes on the basis of: 1 - low-pressure polyethylene; 2 - high-pressure polyethylene.

membranes were similar to the ion-exchange resin AV-17. Orig. art. has: 2 tables and 4 graphs.

SUB CODE: 11, 07/ SUBM DATE: none/

ORIG REF: 008/

OTH REF: 001

Card 2/2

vmb

AUERMAN, L.Ya.; DOTSENKO, L.D.; PUCHKOVA, L.I.

Investigating the surface active properties of phosphatide
concentrate. Izv.vys.ucheb.zav.; pishch.tekh. no.1:76-78

1. Kafedra tekhnologii khlebopecheniya Moskovskogo tekhnologicheskogo instituta pishchevoy promyshlennosti.
(Phosphatides) (Surface active agents)

PUCHKOVA, L.I.; CHISTOVA, V.S.

Effect of added phosphatide concentrates on the technological
process of wheat bread manufacture. Trudy MTIPP 4:96-104 '56.
(MLRA 9:10)

(Phosphatides) (Dough)

GILFANIKH, V.I., aspirant; ZHAKOV, N.S., dotsent; IGNATOVICH, V.Y.,
student; PUCHKOVA, I.I.

Prophylaxis and therapy of white muscle disease in lambs.
Veterinariia 41 no.2:59-60 F '65. (MIRA 18:3)

1. Vitebskiy veterinarnyy institut (for Gidranovich, Zhakov,
Ignatovich). 2. Glavnnyy veterinarnyy vrach sovkhoza "Orlovichi"
Vitebskoy oblasti (for Pushkova).

PUCHKOVA, L.I.; Prinimali uchastiye; OSIPOVA, T.T.; NOVIKOVA, N.S.

Study and evaluation of the spinning characteristics of the
new synthetic fibers. Nauch.-issl.trudy TSNIKHBI za 1958 g;
3-20, (MIRA 16:1)
(Cotton--Testing)

AUERMAN, L.Ya.; PUCHKOVA, L.I.; PROKUSHENKOVA, L.I.

Study of the surface active properties of phosphatide concentrates.
Izv.vys.ucheb.zav.pishch.tekh.no.5:59-62 '60. (MIRA 13:12)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
Kafedra tekhnologii khlebopекarnogo proizvodstva.
(Phosphatide) (Surface tension)

PUCHKOVA, L.I.

✓ Use of phosphatide concentrates in bread baking. L. I. Puchkova. Trudy Moskov. Tekhnol. Inst. Pishchevot Proiz. 1954, No. 3, 44-59; Referat. Zhur., Khim. 1954, No. 50872.—Use of phosphatide concentrates (from soybeans and sunflowers) contg. 39.18-65.30% phosphatide in the production of bakery goods from 1st- and 2nd-grade wheat flour in amts. of 0.1-2.0% of the wt. of flour favorably affected the quality of the product. Best results were obtained when the phosphatide concentrate was used together with oxidation promoters such as KBrO₃, KIO₃, or (NH₄)₂S₂O₈ in the usual amts. M. Hoseh

AUERMAN, L.Ya.; PUCHKOVA, L.I.; LAZAREVA, L.V.

Surface active properties of phosphatide concentrate in interaction
with flour, gluten, and starch. Izv. vys. ucheb. zav.; pishch. tekhn.
(MIRA 14:8)
no.4:75-78 '61.

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti,
kafedra tekhnologii khlebopekarnogo proizvodstva.
(Phosphatides) (Flour)

SOV/21-59-3-25/27

AUTHOR: Puchkova, L.P.

TITLE: Certain Structural Features of Hemipteral Egg
Membranes (Nekotoryye cherty stroyeniya obolochek
yaits poluzhestylykh (Hemiptera-Heteroptera))

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 3,
pp 335-337 (USSR)

ABSTRACT: This brief summary of a study of structural features
of hemipteral egg membranes states that they are of
serous origin, formed at the end of ovulation. The
serous membrane on the eggs is a medium of increas-
ing their kleidoicity, which is attained in three
ways, which are occasionally combined: 1) mechan-
ical reinforcement of the chorion; 2) increasing
the resistance of the chorion layers to chemical
agents; 3) formation of a serous film. Only in
Eurydema eggs, is the outer apparently serous layer
of alveolar structure, and can be easily scraped off.

Card 1/2

Certain Structural Features of Hemipteral Egg Membranes SOV/21-59-3-25/27

There are 1 set of diagrams and 3 references, 2 of which are English and 1 German.

ASSOCIATION: Institut zoologii AN UkrSSR (Institute of Zoology of the AS UkrSSR)

PRESENTED: November 29, 1958, by A.P. Markevich, Member of the AS UkrSSR

Card 2/2

PTITSYNA, L.P.; PUCHKOVА, L.V.; RUMYANTSEVA, L.V.

Metric invariants of quadrics in quasi-elliptical spaces. Dokl.
AN Azerb. SSR 16 no.7:639-641 '60. (MIRA 13:9)

1: Kolomenskiy pedagogicheskiy institut. Predstavлено akad. ~~AN~~
AzerSSR Z.I. Khalilovym.
(Quadrics)

KIR'YANOVA, Ye.S.; PUCHKOVA, L.V.

Neoaplectana bothynoderi Kirjanova et Putchkova, sp.n. (Nematodes),
a new parasite of the sugar beet weevil. Trudy Zool. inst. 18:53-62
'55. (MLRA 9:2)
(Parasites--Weevils) (Nematoda)

USSR/General and Special Zoology. Insects

P

Abs Jour : Ref Zhur - Biol., No 6, 1958, No 25749

Author : Puchkov V.G., Puchkova L.V.

Inst : Not Given

Title : The Eggs and Larvae of Genuine Hemiptera -- Pests of Agricultural Plants. (Yaitsa i lichinkinnastoyashchikh poluzhestkokrylykh--vrediteley sel'skokhozyaystvennykh kul'tur.)

Orig Pub : Tr. Vses. entomol. o-va, 1956, 45, 218-342

Abstract : These were descriptions and sketches of the bugs' eggs of the following families on the steppes and forests of the European part of USSR: Anthocoridae, Miridae, Nabidae, Coreidae, Pentatomidae, Lygaeidae, Pyrrhocoridae and identifications tables of the eggs of the first five families. Descriptions (and sketches) of the larvae of Miridae, Lygaeidae, Pyrrhocoridae, Coreidae, Pentatomidae and their identification tables were given. A table of the dimensions of the eggs, larvae and certain parts of their bodies was appended. The names of the bugs and their synonyms were indicated.

Card : 1/1

PUCHKOVA, L.V.

Eggs of true Hemiptera-Heteroptera. Part 2: Lygaeidae. Ent.
oboz. 35 no.2:262-284 '56. (MLRA 9:10)

(Lygaeidae)

PUCHKOV, V.G. [Puchkov, V.H.]; PUCHKOVA, L.V.

The predatory leaf bug *Stethoconus cyrtopeltis* Flor and its
relations with the pear lace bug *Stephanitis pyri* F. Zbir. prats'
Zool. muz. AN URSR no.28:79-84 '57. (MIRA 11:5)
(Leaf bugs) (Lace bugs)

PUCHKOVA, L.V.

Eggs of true Homoptera - Heteroptera. Part 3: Coreidae (supplement).
Part 4: Macrocephalidae. Ent. oboz. 36 no. 1: 44-58 '57.
(MLRA 10:4)

(Coreidae) (Macrocephalidae)

A general survey of the structure of ovipositor or of adaptations with which it is substituted in other families of the order. A definitive table of the eggs of 33 species of the family Coreidae of the European part of USSR (without Predkavkaz'ye and Zakavkaz'ye) with numerous drawings illustrating the form of the egg, the cap of ovipositor, the structure of chorion, and the character of laying. Plants on which the eggs are deposited, the calendar periods of their occurrence and wintering. Description of the egg of Phymata crassipes.

PUCHKOVA, L.V.

COUNTRY : USSR
CATEGORY : General and Specialized Zoology. Insects. P
ART. NO. : ZH Biol., No. 23, 1958, No. 105129

AUTHOR : Puchkova, L. V., Puchkov, V. G.
INST. : Academy of Sciences, Ukrainian SSR - Inst. of Zoology
TITLE : Some Characteristics of the Morphology of Abdominal Scent Glands in the Larvae of Scale Insects.

ORIG. PUB. : Dopovid AN USSR, 1958, No. 1, 100-104

ABSTRACT : Larvae of the families Cydnidae, Plataspidae, Scutelleridae, Pentatomidae and Acanthosomatidae were studied. There are functioning odor glands (G) on three tergites, and a number of species retain rudiments of the fourth G. In Plataspidae and Cydnidae, the glands are azygous. In Coptosoma scutellatum (Plataspidae) they open in the form of a wide fissure, and in Cydnidae, as in rest of the scale insects, in the form of lateral pores which remain after the fissure is grown over. Characteristic of the larval stage is a

Card: 1/2

AUTHOR:

Puchkova, L.V.

SOV-21-58-8-27/27

TITLE:

Modification of Female Genitalia in Stagonomus Amoenus Bruelle
(Modifikatsiya zhenskikh genitaley u Stagonomus amoenus Bruelle)
(Hemiptera - Heteroptera, Pentatominae)

PERIODICAL:

Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 8,
pp 903-906 (USSR)

ABSTRACT:

The genitalia of Stagonomus amoenus consist of the same parts as those of other Pentatominae species, but they are modified as a result of adaptation to the manner of oviposition. Farnasternites VII lose their stigmae in the larvae at instars II - III, but in the imago they are part of the scutellum covering the genitalia from above. The genitalia are supported by a projection of segment VII and the spoon-shaped curved gonocoxae VII which are provided with a strong articulated process. The arch is narrow, rather intensely chitinized; its apex is visible from without, is obtuse and has several tough bristles. The triangle is elongated and partly visible in the gap between the gonocoxae VIII which are directed towards each other. The seminal-receptacle is of the pentatomoidal type, and a distinctive feature is an axone which is longer than the ampule.

~~0000170~~

Inst. Zoology, AS UkrSSR

PUCHKOVA, L. V., Candidate of Biol Sci (diss) -- "The structure and development of eggs of ground Hemiptera-Heteroptera and their classification". Kiev, 1959. 15 pp (Acad Sci Ukr SSR, Inst of Zool), 150 copies (KL, No 22, 1959, 112)

PUCHKOVA, L.V.

Eggs of true bugs (Hemiptera - Heteroptera). Report No.5: Pentatomidea, Pt.1. Ent. oboz. 38 no.3:634-648 '59. (MIRA 13:1)

1. Zoologicheskiy institut Akademii nauk SSSR, Kiyev.
(Stinkbugs) (Insects--Development)

PUCHKOVA, L.V.

Eggs of true bugs (Hemiptera-Heteroptera). Report No.6: Pentatomidae. Part 2: Pentatomidae and Plataspidae. Ent. oboz. 40 no.1: 131-143 '61.
(Stinkbugs) (Insects—Eggs)

(MIRA 14:4)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343520013-9

PUCHKOVA, L.V.

General features of the structure of the eggs and female
genitalia in the Scutellercidea. Pratsi Inst.zool.AM URSSR
15:117-125 '59. (MIRA 13:7)
(Hemiptera)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343520013-9"

PUCHKOVA, L.V.

Morphological description of a stinkbug head (Hemipter - Heteroptera, Pentatomoidea). Zool.zhur. 38 no.12:1825-1834 D '59.
(MIRA 13:5)

1. Institute of Zoology, Academy of Sciences of the Ukrainian
S.S.R., Kiev.
(Stinkbugs) (Insects--Anatomy)

PUCHKOVA, T.V.

Some characteristics of the morphology of the antennae of water bugs. Fratsi Inst. zool. AN URSR 20:217-224 '64.

(MIRA 18:4)

TOPACHEVSKIY, A.V.; OKSIYUK, O.P.; CHERNITSKAYA, L.N.; YURCHENKO, V.V.;
PUCHKOVA, L.V.; POLIVANNAYA, M.F.

Hydrobiological characteristics of canals in the southern part
of the Ukrainian S.S.R. based on the materials of 1962. Trudy
Gidrobiol. ob-va 14:163-169 '63. (MIRA 17:6)

1. Institut hidrobiologii AN UkrSSR, Kiyev.

PTITSYNA, L.P.; PUCHKOVA, L.V.; RUMYANTSEVA, L.V.

Metric invariants of equations of quadrics in a quasi-elliptic
space. Uch. zap. MGPI no.208:265-277 '63. (MIRA 17:6)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343520013-9

VYZHGINA, L.B.; PUCHKOVA, L.V.

Metric invariants of equations of quadrics in hyperspaces. Uch.
zap. MCPI no.208:214-221 '63. (MIRA 17:6)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343520013-9"

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343520013-9

PUCHKOVA, L.V.

Frenet's formulae in semielliptic spaces. Izv. AN Azerb. SSR.
Ser. fiz.-mat. i tekhn. nauk no.4:59-64 '63. (MIRA 16:12)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343520013-9"

PUCHKOVA, L.V.

Venation of posterior wings of water and shore bugs. Pratsi
Inst. zool. AN URSR 17:124-131 '61.

Leaf miners and gall insects in the middle Dniepr Valley.
118-123 '61.

Statistical analysis in mowing and some other methods for de-
termining the population of insects. 132-139 (MIRA 16:11)

PUCHKOVA, L.V.

Rudiments of odoriferous glands in the pupae of the family Scarabaeidae. Zool. zhur. 42 no.8:1266-1268 '63. (MIRA 16:9)

l. Institute of Hydrobiology, Academy of Sciences of the Ukrainian S.S.R., Kiev.
(Glands, Odoriferous) (Scarabaeidae)

PUCHKOVA, L.V.

Characteristics of the wintering of Nepidae (Hemiptera-Heteroptera).
Vop. ekol. 7:147-149 '62. (MIRA 16:5)

1. Institut hidrobiologii AN UkrSSR, Kiyev.
(Water scorpions) (Hibernation)

PUCHKOVA, L.V., nauchnyy sotrudnik

The sprout fly Chortophila cilecrura on cabbage. Zashch. rast.
et vred. i bol. 6 no.10:58 0 '61. (MIRA 16:6)

1. Ukrainskaya akademiya sel'skokhozyaystvennykh nauk, Kiyev.
(Cabbage—Diseases and pests)
(Flies—Extermination)

PUCHKOVA, L. V., kand. biolog. nauk

The cucumber leaf bug *Halticus saltator* Geoffr in greenhouses.
Zashch. rast. ot vred. i bol. 5 no.11:57 N '60.
(MIRA 16:1)

(Cucumbers—Diseases and pests)
(Leaf bugs—Extermination)

PUCHKova, Lidiya Vasil'yevna; PUCHKOV, Georgiy Vasil'yevich; KILLEROG,
N.M., red. izd-va; LISOVETS, A.M., tekhn. red.

[Invertebrate pests of stored grain and grain products; a brief
guide] Bespozvonochnye - vrediteli zerna i zernovykh produktov;
kratkii opredelitel'. Kiev, Izd-vo Akad. nauk USSR, 1962. 31 p.

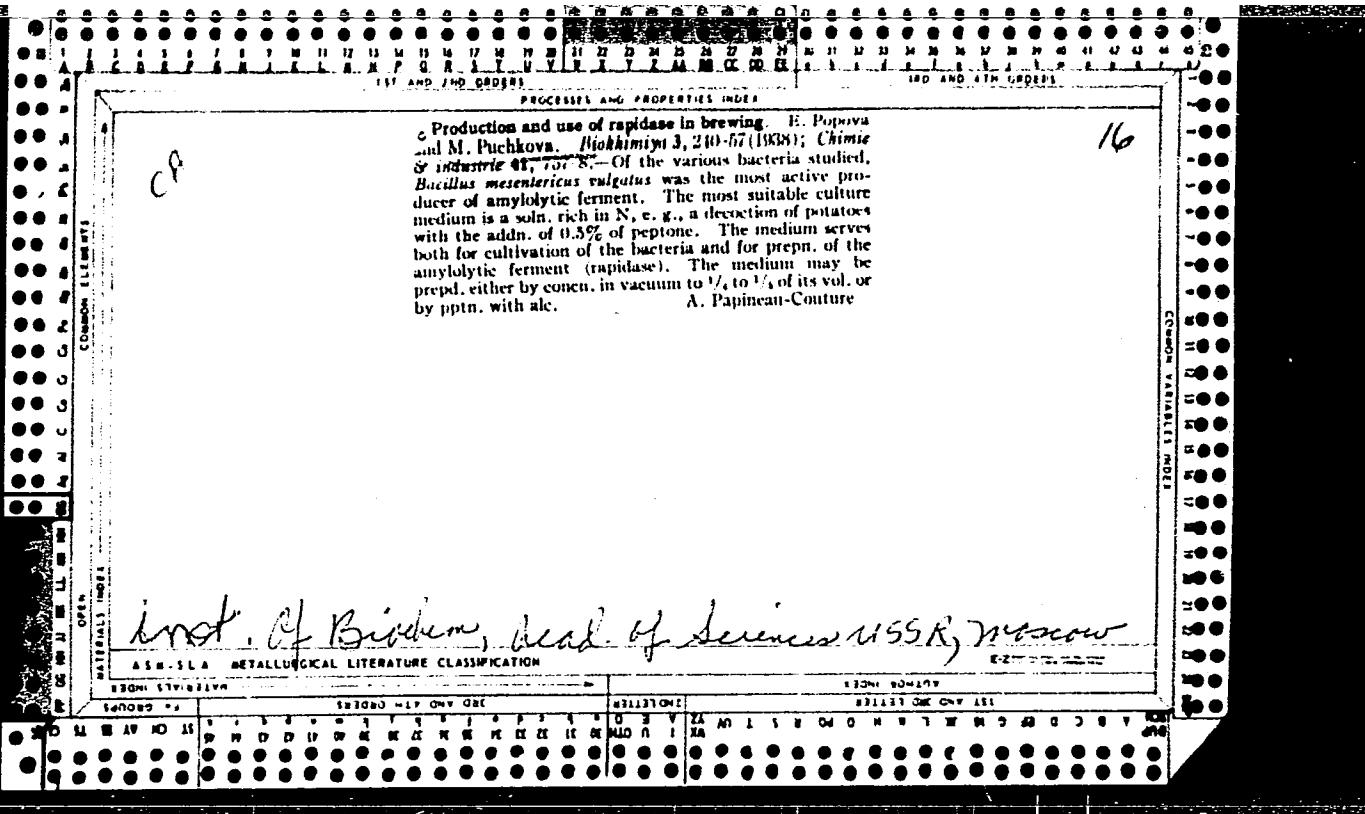
(MIRA 15:7)

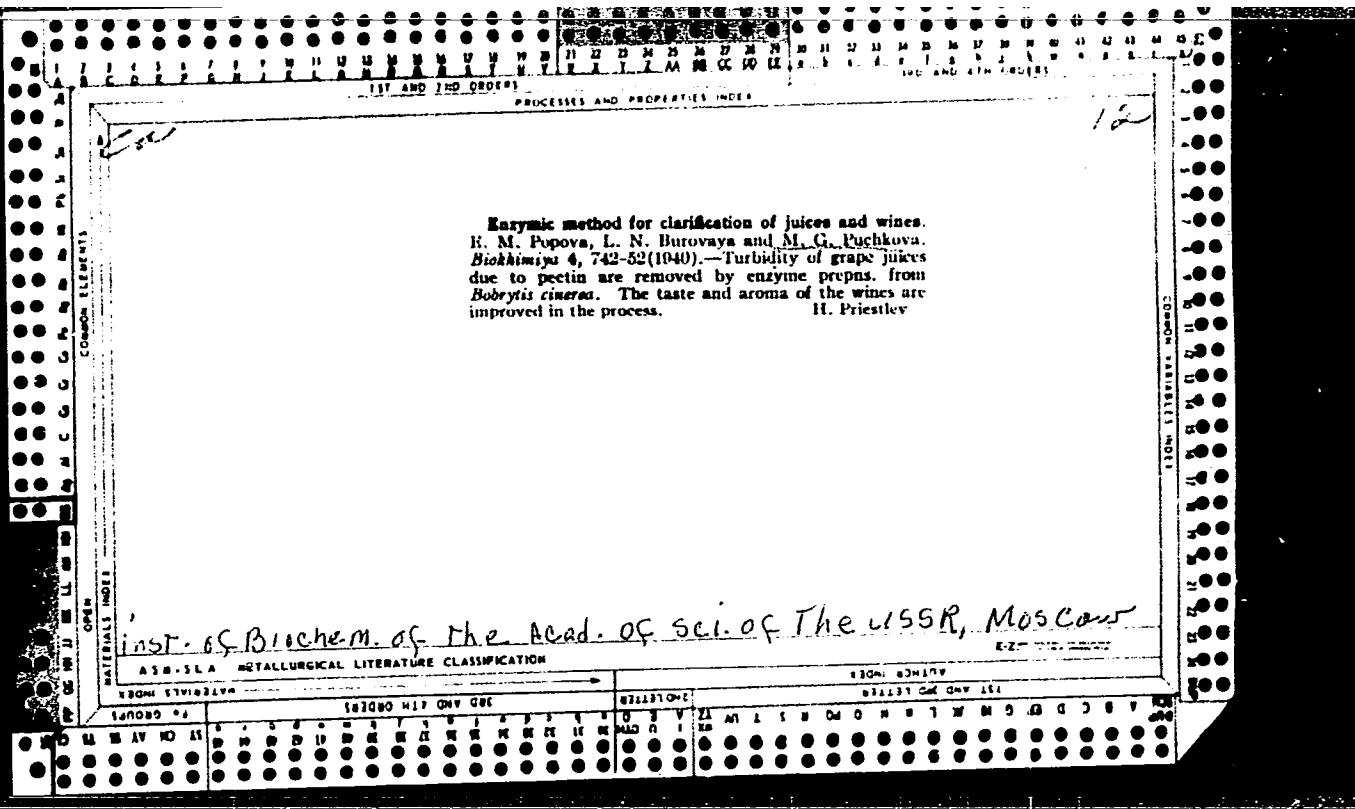
(Grain--Diseases and pests)
(Insects, Injurious and beneficial)

POPOVA, Ye.M.; PUCHKOVA, M.G.; IVANITSKAYA, Ye.A.

Using yeast autolysates to improve the quality of bulk process
champagne. Biokhim. vin. no. 5:79-87 '57.
(MLRA 10:6)

1. Institut biokhimii im. A.N. Bakha AN SSSR.
(Champagne (Wine)) (Yeast) (Autolysis)





PUCHKOVA, M.G.

POPOVA, Ye.M.; PUCHKOVA, M.G.

Factors influencing the rate of enzyme clarification of wine
and juices [in Russian with English summary] Biokhim.vin. no.1:
60-70 '47. (MIRA 7:10)

1. Institut biokhimii imeni A.N.Bakha.
(Wine and wine making) (Enzymes)

PUCHKOVA, M.G.

POPOVA, Ye.M.; PUCHKOVA, M.G.

Significance of a fermentative preparation from *Botrytis cinerea*
for grape musts [in Russian with English summary]. Biokhim.vin.no.1:
71-76 '47. (MLRA 7:10)

1. Institut biokhimii imeni A.N.Bakha.
(Wine and wine making) (*Botrytis cinerea*)

CA

11c

Oidium lactis and its capacity to synthesize fats. R. M. Popova and M. G. Puchkova (Biochem. Inst., Acad. Sci., Moscow). *Mikrobiologiya* '46, 51-8(1947).—The most economical medium for biosynthesis of fat by *O. lactis* (I) is whey. Since I has antibiotic properties it does not require sterile conditions. Strain N 1 of I, isolated from milk, rated best in yield. Good yield of mycelium requires ample air supply, active evapn., and proper nutrients (e.g. $\text{NH}_4\text{H}_2\text{PO}_4$, NaCl , asparagine, and urea). Lipase, chief enzyme involved in the fermentation, governs both fat synthesis and lipolysis. To avoid excessive losses by lipolysis an oxidizing agent is added, e.g. 0.1% H_2O_2 or 0.005% KBrO_3 . The proteolytic enzymes of I also have an important function in the biosynthesis of fat. Recovery of the fat after fermentation is difficult; CHCl_3 extn. after treatment with aq. HCl is more effective than Et_2O extn. Comsts. of the fat from 8 cultures were: acid no. 141-172; sapon. no. 170-211; iodine no. 24-56. Pilot plant fermentations (best effected by adding successive increments of the medium) yielded a palatable product contg. at least 23% fat and about 20% protein.

Julian F. Smith

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

EX-REF LIBRARY

Puchkova M.G.

✓ Biochemical nature of sherry wines. N. M. Slaakyan,
E. M. Popova, I. A. Egorov, and M. G. Puchkova. *Bio-
khim. Vinodeliya, Akad. Nauk S.S.R., Sbornik 2, 69-85*
(1948).—Eleven sherries of different ages (1-46 years old)
were investigated. It was found that the sherry-type fer-
mentation consists of 2 periods, formation of AcH and trans-
formation of AcH into acetal, and that the flavor of sherry
wines depends on the ratio of AcH/acetal rather than on
their abs. units. The best old wines had a ratio of 1.21-1.28.
Org. esters (up to 20.8 meq./l.) were formed during the
fermentation. Aging of wines was accompanied by a de-
crease of esters. Active esterase was found in all wine
samples; its hydrolytic and (or) synthetic activity depended
on the origin and age of wine. The higher amt. of tannins in
old wines was due to their diffusion from the oak containers
into the wine and (or) to the reduction of the oxidized forms
of tannins during the aging. Spanish sherry contained the
highest amt. of phloroglucinol (46.0 mg./l.) as compared
with the native sorts (3.0-8.8 mg./l.). The lowest amt. of
amino N (24.00 mg./l.) was found in the most typical
sherries. The amt. of vitamins (thiamin, riboflavine, and
niacin) decreased during the fermentation. The differences
among the samples with respect to the titratable acidity and
pH were small. 22 references. E. Wierlicki.

Inst. Biochem.-im. A.N. Bakule
Inst. Wine and Wine Making, A.S. USSR

Puchkova M. G.

Microbiological method for determination of nicotinic acid in wine. E. M. Popova and M. G. Puchkova. *Biochim. Vinodlovo, Akad. Nauk S.S.R., Sbornik 2, 177-82* (1948).—Nicotinic acid (I) was detn. by using *Lactobacillus plantarum* as the test organism. The basic nutrient medium contains dextrose 5, AcONa 3 g., acid-hydrolyzed casein 25 (100 mg./ml.), tryptophan 50, cystine 100 ml. (1 mg./ml.), adenine-guanine-uracil 5 ml. (1 mg. each/ml.), thiamine 0.5, Ca pantothenate 0.5, pyridoxine 1.0, riboflavin 0.1, β -H₂N-C₆H₄O₂H 0.5 ml. (0.1 mg./ml.), salt soln. A (K₂HPO₄ 25 and K₃HPO₄ 25 g./250 ml.) 2.5 ml., and soln. B (MgSO₄·7H₂O 10, NaCl 0.5, FeSO₄·7H₂O 0.5, and MnSO₄·4H₂O (0.5 g./250 ml.) 2.5 ml.). The total amt. was made to 250 ml., pH 6.8. The soln. was sterilized at 1 atm. for 15 min. before use. A standard soln. of I, contg. 10 mg. I/100 ml. alc., dild. to the concn. of 0.4 γ/ml., was used as a standard. Wine samples (10 ml.) were hydrolyzed with 0.5 ml. 0.8% HCl for 25 hrs., neutralized, made to pH 6.8, and dild. to 100 ml. To 10 ml. of the nutrient medium was then added the standard I or 0.0-5.0 ml. of the sample soln. and 1 drop of the suspension of *L. plantarum*. The mixt. was incubated at 30° for 48 hrs. Lactic acid, the formation of which is directly proportional to the I concn., was then titrated with 0.05*N* NaOH with bromothymol blue as indicator. Ten different wines analyzed contained 590-900 γ I/l. The method can be used successfully for the detn. of I in grapes, leaves, musts, and other natural products. E. Wiericki

Puchkova, M. G.

The role of esterase in the aging process of champagne wines. E. M. Popova and M. G. Puchkova. *Biokhim. Vysokat., Akad. Nauk S.S.R., Soobrash. 3, 69-81 (1950).* —The effect of the preps. from *Oidium laevis*, *Botrytis cinerea*, and *Aspergillus oryzae* on biochemical and physicochemical properties of champagne wines is described. The addn. of the preps. alone or in combination with yeast autolyzates highly increased the synthetic esterase activity of the wines. A slight activity of peroxidase, invertase, and glucosidase was also noticed during the aging; the activities of proteolytic enzymes, polyphenol oxidase, and dehydrogenase were revealed only at the beginning of the aging process. Org. esters, glycerol, and nicotinic acid were increased, and the products obtained were superior in flavor, color, taste, and transparency as compared with the nontreated wines. Most effective was the prep. from *B. cinerea*. E. Wierblek.

(1)

FEB 21 1986
Tryptophan and vitamins of the group B in grape wines.
N. M. Sisakyan, I. A. Egorov, and M. G. Puchkova.
Biokhim. Vinodeliya, Akad. Nauk S.S.R., Sbornik 3,
96-101(1950).—Nicotinic acid, 400-1800 γ/l., was found
in all 36 different wines investigated, while thiamine was
2.5-27.2 γ/l., and riboflavin 1.7-12.5 γ/l., in only 22 and
23 samples, resp. The tryptophan content (detd. by
Lactobacillus a-alinosus) varied from traces to 0.4 γ/l.
However, no tryptophan could be detected when partition
paper chromatography was applied (cf. preceding abstr.).
The nutritional value of wine is pointed out. E. W.

MD

(2)

Puchkovskaya
Physiobiological features of the development of sherry film and its use in production. N. M. Slsakyan, E. M. Popova, N. F. Saenko, M. A. Gerasimov, and M. G. Puchkova. *Biakhim. Vinodeliya, Sbornik* 4, 39-55 (1953). Investigation of biochemical processes of viniculture shows that there is a decrease in the wine of the vitamins of group B, suggesting that the vitamins are used by the yeast cells in the nature of an add-on factor of nutrition. Previous observations have shown that the microorganisms of yeast are capable of absorbing vitamins from the surrounding media. Studies were made of (1) microbial observations on the intensity of growth and the development of sherry film and its morphological changes at the time of processing; wine nitrogenous and bioactive substances; and (2) the biochemical and chemical processes underlying sherry formation. Results of the first tests show that the most favorable conditions for the development of the film is displayed by the mediums in which there has been the addition of 0.5% yeast autolysis processed at a temp. of -180°, 120 mg./l. ammonia N, and 0.4 mg./l. riboflavin. The amounts of aldehydes, and specifically acetal, are considerably increased in comparison with the control. A second set of tests was performed to eliminate the necessity of the -180° temp. Wines were treated at -180°, -40°, -10° (with a 5-fold

freezing and thawing technique); and holding at 48° for 48 hrs. Yeast in the control sample and in the heated sample generated very slowly. The best activity was noted with -180° treatment with the activity decreasing with an increase in temp. After the treatment a rapid increase in the activity of esterase and peroxidase is noted. After preliminary lab. expts., tests were made in 5 large vats containing: (A) control wine, (B) wine + 0.5% maceration juice, (C) wine + 0.5% yeast autolysis product processed at a temp. of -180°, (D) wine + 80 mg./l. ammonia N, (E) wine + 120 mg./l. ammonia N. All were carefully mixed and inoculated with a layer of sherry yeast No. 96. The condition of the plasma cells were noted at different stages of development of the film. The most rapid growth was observed in (C) and (B). During the first 60 days, the amt. of alc. decreases with the greatest decrease being shown by (B). A decrease in sugar and total and volatile acids is noted with an increase in aldehydes. It is possible to cause sherry formation by introducing to the original wine material other wine material rich in extractable substances; bioactive compounds in the form of maceration juice (I) or yeast autolysis' product. Investigations indicate that the greatest effect is obtained by the addition of I in combination with ammonia.

S. B. Raddeig

Puchkov, M.G.

Treatment of champagne stock with enzymic preparation
in the vat method. E. M. Popova and M. G. Puchkov.
Vinskaya Promst, No. 4, 153-50 (1961). Treatment
with an enzymic prep. from *Bacillus cereus* in the first
stages of fermentation gives the best results. This is shown
by the increased amounts of total esters, glycerol, acetals, and
nicotinic acid. Thus use of enzymic preps. can provide
improved quality and an acceleration in the maturing of the
wine.

S. B. Radding

POPOVA, Ye.M.; PUCHKOVA, M.G.

Comparative study of autolysates of different yeasts. Biokhim. vin.
no.6:53-59 '60. (MIRA 13:10)

1. Institut biokhimii im. A.N. Bakha AN SSSR.
(Yeast) (Autolysis) (Wine and wine making--Microbiology)

ARTYUKHOVA, N.N.; BREMER, L.F.; GRIGORENKO, A.S.; IPATOVA, M.S.;
KARBYSHEVA, T.D.; KOZLOV, V.M.; KOLYSHEVA, L.I.;
KUCHUMOVA, N.A.; MAKAROVA, M.Ye.; PUCHKOVA, N.A.;
SEKIRINA, Ye.T.; SOKOLOVA, T.S.; STATIYEVA, V.F.;
TYUNYAYEVA, V.V.; KHRAMTSOVA, A.A.; CHURAYEVA, V.V.;
FOKIN, D.F., red.

[Foreign trade of the U.S.S.R. for 1959-1963; a statistical abstract] Vneshniaia torgovlia Soiuza SSR za 1959-1963 gody; statisticheskiy sbornik. Moskva, Vneshtorgizdat, 1965.
(MIRA 18:7)
483 p.

1. Russia (1923- U.S.S.R.) Ministerstvo vneshney torgovli. Planovo-ekonomiceskoye upravleniye. 2. Nachal'nik Planovo-ekonomiceskogo upravleniya Ministerstva vneshney torgovli SSSR (for Fokin).

PUCHKOVA, N. G.

PHASE X

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 706 - X

BOOK

Call No.: AF646764

Author: PUCHKOVA, N. G., Edit.

Full Title: STUDY AND APPLICATIONS OF OIL PRODUCTS.

SYMPOSIUM OF WORKS OF THE TeKhRATSNEFT' (All-Union Bureau
for Efficient Use of Oil Products) Issue 2.

Transliterated Title: Issledovaniye i primeneniye nefteproduktov
(Sbornik rabot Tekhratsnefti) Vypusk II.

PUBLISHING DATA

Originating Agency: Ministry of the Petroleum Industry. Main
Office of Oil Marketing (Glavnftesbyt). All-Union Scientific
Research Institute for Petroleum Products. (VNIITNEFT')

Publishing House: State Scientific and Technical Publishing House
of Petroleum and Mineral Fuel Literature (Gostoptekhizdat)

Date: 1950 No. pp.: 329 No. of copies: 3,000

Editorial Staff: None

PURPOSE AND EVALUATION: This is a symposium of 22 articles on the
study and uses of oil products. The articles are on the
scientific research level, are based on data obtained by
experiments, and are supplied with lists of references. This
symposium was collected by the All-Union Office for Efficient

1/20

AID 706 - X

Issledovaniye i primeneniye nefteproduktov (Sbornik rabot
Tekhratsnefti) Vypusk II.

Utilization of Oil Products ('Tekhratsneft') from studies conducted in 1947-48 and to some extent in 1949. This is the second issue of publications on the research work conducted in this office. This book is intended for engineers, technicians and scientific workers engaged in the field of research, transportation, storage and use of oil products.

TEXT DATA

Coverage: This is a symposium of articles on various problems connected with the production, study and use of oil products. The 22 articles are the result of finished studies on problems relating to the selection and testing of fuels and lubricants (6 articles), the physical and chemical study of oil products (9 articles), consistent lubricants (3 articles) and, finally, economy of petroleum depots and main oil pipe-lines (4 articles). No special chapter has been assigned to experiments and studies of addition agents for lubricants as this constitutes a rather small field.

2/20

AID 706 - X

Issledovaniye i primeneniye nefteproduktov (Sbornik rabot
Tekhratsnefti) Vypusk II.

Table of Contents and Synopsis	Page
Chapter One	
Preface	3
Selection and Testing of Fuels and Lubricants	
1. Voinov, N. P. Selection of the Most Favorable Conditions for Running in of an Idling "Moskvich" Motor.	5
By adjusting the "Moskvich" motor to proper running conditions and selecting suitable lubri- cants (with addition agents) the friction wear of the motor's moving parts can be reduced and the motor's life extended. Tables, charts. No references listed.	
2. Rubinshteyn, S. F. Influence of the Type of Motor Operation on its Wear.	11
The wear of a "Moskvich" motor was tested at different speeds and using lubricants with different additives. The results of those tests are given, the best running conditions indicated, and the most 3/20	

AID 706 - X

Issledovaniye i primeneniye nefteproduktov (Sbornik rabot
Tekhratsnefti) Vypusk II.

- | | Page |
|---|------|
| suitable lubricants selected. Tables, charts. | |
| References: 3 Russian (1946-1949) | |
| 3. Voinov, N. P. Testing Automobile Lubricating Oils with
Complex Additives of Soviet Production | 16 |
| The present trends in automobile motor construction
are to increase power by increasing compression, to
decrease weight while accelerating the motor
revolutions, and to improve the quality of material for
parts subjected to friction. These trends present
difficult problems in the finding of new suitable
lubricants. Increasing motor power while decreasing
weight leads to an increase of specific pressure in
friction joints which requires lubricating film with
higher strength. The higher quality of friction
surfaces allows for smaller clearances between them,
which require lubricants of lower viscosity and
higher lubricating characteristics. The accelera-
tion of the motor revolutions with an increase in | |

4/20